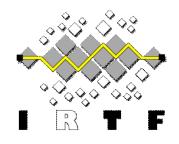# Update on the Internet Research Task Force

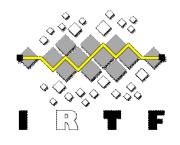Aaron Falk

IRTF Chair

IETF-71 – Philadelphia
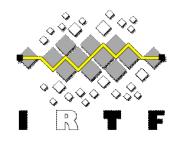
IRTF Status

- Seven Research Groups (RGs) met this week
  - Internet Congestion Control RG
  - Anti-Spam RG
  - Routing RG
  - Scalable, Adaptive Multicast RG
  - Delay Tolerant Networking RG
  - Host Identity Payload RG
  - Network Management RG

IRTF Status

- Closed two RGs:

  – End-Middle-End RG

  – Internet Measurement RG

- Continuing to discuss the future of the Peer-to-Peer RG

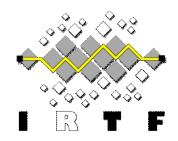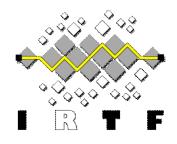- Reviewed the Network Management RG with the IAB

IRTF RFCs

- 3 IRTF drafts in RFC Editor queue
  - ~8 drafts in progress towards publication

- Draft to establish an IRTF RFC stream is in development, should be published RSN

Suggestions for New Work

- IAB seeking an RG on *unwanted traffic mitigations*
  - Email going out to research community

- Interest in RG on *network virtualization*
  - BarBOF earlier this week

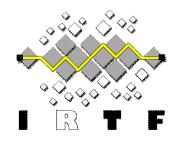- Continued interest in an RG on *QoS policy framework*
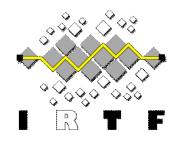
A few RG highlights...

Anti-Spam RG

- Possible resurrection of RG while meeting at this IETF

- Interest in finishing two drafts
  - Description of mechanisms used for blacklists
  - BCP on blacklist operations

- Populating wiki on spam mitigation techniques
  - May evolve to document analyzing the worst (WCP)
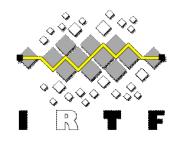 - http://wiki.asrg.sp.am

Routing Research Group

- Lots of activity: 930 msgs since IETF-70

- Evaluating several new routing architecture proposals

- Building consensus towards a recommendation by March 2009
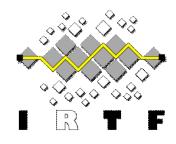 - Clarifying goal to be recommending an *architecture* rather than a *proposal*

Delay Tolerant Networking RG

- DTN implementations finding broad application
  - Nomadic, arctic users
  - Commercial, LEO satellites
  - DARPA mobile networks

- 2 RFCs, 16 drafts – need a roadmap

- DTN interop in the terminal room
  - *(stop by and say "hi")*

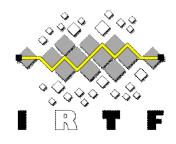- BarBOF tonight to discuss establishing a community-based reference DTN implementation

Host Identity Protocol RG

- RFC Editor about to publish (Auth48) "NAT and Firewall Traversal Issues of Host Identity Protocol (HIP) Communication"

- Several new drafts presented on extending HIP
  - Use of certificates in HIP
  - HIP-based mobile router
  - SPI-based network address translation

- Continued discussion on legacy NAT and HIP-aware middlebox traversal
  - Possible P2P-SIP applicability
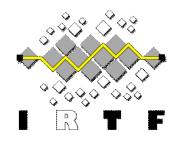
Internet Congestion Control RG

- Reviewing congestion control proposals for TSV area:
  - Compound TCP, CUBIC

- Continuing work on surveys:
  - Current congestion control RFCs
  - Open congestion control research issues

- Starting discussion of TCP Slow Start enhancements

Network Management RG

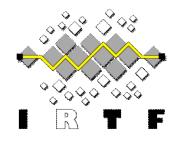- Studying the behaviour of management protocols using network traces
  - Seeking collaborators from enterprise nets

- Finalizing a document specifying SNMP trace exchange formats

- Specifying format for aggregating SNMP messages

- Feedback from IAB review: seek more interaction with operators (e.g., NANOG, RIPE)
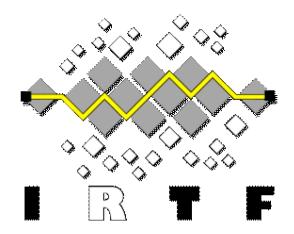
Scalable, Adaptive Multicast RG

- Drafts include
  - Protocol for hybrid multicast
  - Applying P2P-SIP overlays to multicast

- Encouraging prototyping

- Tentative plan to have interim RG meeting at MILCOM 2008
  - Coordinated with special session on P2P Overlays

Mobility Optimizations RG

- ## Finishing up:
  - Location privacy for mobile v6
  - Handover pre-authentication

- ## Multicast mobility
  - Problem statement nearly done
  - Made some recommendations at IETF-70

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